

A draft methodology for assessing governance aspects of the water-food-energy-ecosystems nexus

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The Parties to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes have included in the work programme of 2013-2015 an assessment of the water-food-energy-ecosystems nexus in selected transboundary basins. As part of this, the Task Force on the Water-Food-Energy-Ecosystem has been established to oversee and guide the nexus assessment.

The proposed methodology of the assessment to be used by the Task Force is partly based on an analysis of the institutional and governance structures associated with the selected river basins. This document aims to provide an overview of the methodology guiding this analysis. The methodology is divided into four parts. The first part briefly presents the concept of the nexus, the second part explains why there is a need for an analysis of institutions and governance structures within the nexus, the third part presents how the methodology is structured and finally, the fourth part concentrates on the implementation of the methodology.

1. What is the Nexus?

The Integrated Water Resources Management (IWRM) concept focuses on the importance of the equitable management of water as a resource whilst recognising the interconnectedness of three key dimensions: social, environmental and economical. The concept of IWRM has gained growing recognition among a number of audiences (politics, academics, civil society) since the start of this century and opened up a new perspective on water management. This new paradigm of water governance as related to river basins is today often considered as the ultimate geographical reference for managing water. In addition the concept encouraged a shift from top-down to bottom-up management policy. In doing so, it recommends coordination between the different sectors using water and highlights the importance of stakeholders' participation in the decision-making process.

More recently the occurrence of several conferences (the World Economic Forum in 2008, the Bonn Conference in 2011, the Sixth World Water Forum in Marseille in 2012, the Rio +20 negotiations in 2012), has strengthened the concept further and seen the emergence of a new assessment concept at the international level: the nexus.

The emphasis of the nexus has since evolved as further links are made to specific sectors of activity that depend on water, namely energy, food and ecosystems. Indeed, every sector uses water and therefore, to varying degree, has an impact on other water uses. The impact of water use can be seen in two ways. Firstly through withdrawals within the hydrological cycle and secondly through the effect on water flow due to variations related to hydropower production.

It becomes clear that the necessity and importance of the nexus goes far beyond the concept of IWRM alone. It is well accepted and recognised that water use must be achieved through

the careful and equitable management of social, environmental and economical dimensions. However, in order to achieve sustainability the nexus calls for an understanding of the challenges and complex trade offs that inevitably face traditional water frameworks and that governments have to arbitrate.

As mentioned by the World Economic Forum (2011): *“The challenges of natural resource scarcity – food, water and energy – are closely interlinked, and policy and other attempted solutions must take this into account. But taking an integrated view of such issues is highly challenging to most institutions, given the complexity and cross-sectoral approach required. The political commitment necessary to take bold action is often hard to muster”*. Therefore, a nexus perspective allows the consideration of various complex interlinkages between different sectors and encourages the initiation of a transversal overview of related policies and stakeholders.

The nexus approach recognises the importance of the analysis of institutions and their regulations in order to understand the main issues, the main actors and the main tensions between parties. In particular it focuses on the role played by institutions in coordinating the different resource uses and to arbitrate the potential trade-offs existing between water, energy, food and ecosystems.

2. Why is there a need to analyse institutions and governance structures?

The different sectors of activity within the nexus include a great number of actors, complex regulatory frameworks and many different types of legal provisions. The link between not only two, but four sectors of activity¹ tend to increase the complexity and to blur the main issues of such interdependencies. This, in turn, makes it difficult to get a comprehensive picture of the broader system.

Conducting an analysis of institutions helps to gain a better understanding of the context in which the different sectors of activity operate. This context is composed of the following elements: a number of rules dependent on public or private law (see Box 1); different combinations of actors (such as varying degrees of centralised configurations where the government has an impact, or self-organised configuration where actors (often private) have some degree of liberty to negotiate and conclude agreements on resource exchanges) and, at last but not least, by varying rivalries between different uses competing for a limited amount of resources. An analysis of institutions and of governance structures helps to generate understanding of the extent to which conditions are being met in order to achieve sustainable integration of different sectors (consumers) of resources. An analysis also helps to achieve a better understanding of a system that is often complex and to identify its strengths and weaknesses at the local, regional, national and transboundary scale of governance.

BOX 1. DISTINCTION BETWEEN PUBLIC AND PRIVATE LAW

Private law establishes the basis for absolute ownership; public law tempers this absolute ownership by imposing restriction on potential uses of water and land (Gerber et al. 2009).

¹ Winpenny 1992

Within this methodology, every agreement concluded with a public actor has to be assessed as a public law agreement. This is, for example, seen when a concession contract related to hydropower production is granted from a state to a private company. Private law agreements have influence only on agreements made with a private actor. A high number of private law agreements might indicate a larger degree of self-organisation of actors regarding the use of resources.

3. *How does the methodology work?*

This document aims to provide a straightforward methodology in order to analyse the institutions and governance structures framing the nexus. This methodology (to be applied to selected river basins) is designed in order to guide analysts through different steps allowing a progressive understanding of the nexus complexity and the identification of key features influencing inter-sectoral issues. It adopts a *step-by-step* approach fragmenting (or breaking down) the complexity of the object of study, allowing analysts to answer different questions. The methodology is divided into four main steps allowing a progressive and cumulative analysis. Every step should allow the analyst to get an increasingly clear understanding of the system, to finally better understand the governance structure as a whole and to identify some areas that instigate further evaluation regarding how effectively inter-sectoral issues can be addressed.

The first section presents in detail the different steps proposed to guide the analyst through the study of institutions and governance structure. Secondly, the document asks several questions related to each analytical step. To answer the questions, the analyst draws upon different sources and looks at the institutions from different perspectives.

Therefore, answering the questions allows the analyst to get an increasingly precise view of the issues linked to institutions. The first series of questions concerns the identification of main resources uses, the second series of questions concern the main regulations and the third series concern the analysis of actors' configuration. Finally, the last part of the methodology invites the analyst to go into depth by focusing on major issues, tensions and/or use rivalries within the river basin.

The methodology has been constructed and tested within a research project regarding the Rhone River basin². This section aims to present in detail four different steps.

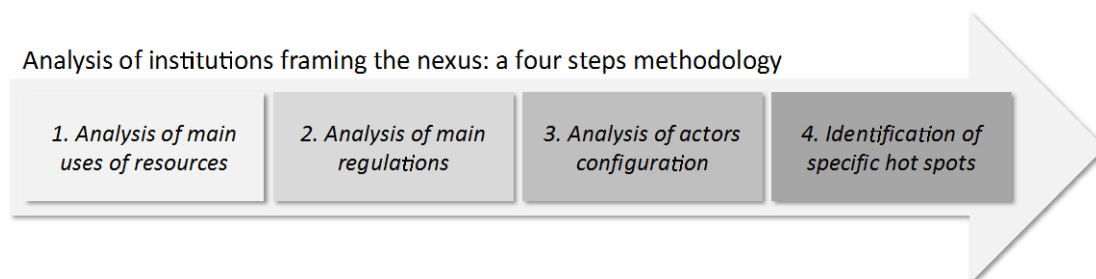


Figure 1. An analysis divided in four different stages

Step 1

To gain a broad understanding of the institutions and governance systems, the first step reflects on the identification of the main sectors of activity involved within the nexus. This

² The research project « GOUVRHONE, Gouvernance du Rhône du Léman à Lyon » is conducted at the Institute for environmental sciences from the University of Geneva.

enables an understanding of the structure of the nexus (what kind of sectors are involved? What kind of resources is used?) and the identification of the main actors involved. This, in turn, gives indications about potential use rivalries between the different sectors (see Box 2). In the case of water, the section also reflects on the trends and concentration of water uses. An analysis of the structure of water use and its evolution is then facilitated. The first step of the methodology also advises the analyst to reflect on the evolution of the different sectors. It encourages the analyst to consider questions such as whether the activity of one sector is increasing or whether one sector of activity has disappeared. Likewise, the analyst should consider the main direction of current trends of national water policy (for example is the national water policy pushing forward a specific agenda i.e. an energy policy leaning towards increased hydropower production).

BOX 2. DEFINITION OF RIVALRIES

Use rivalries depend on resource scarcity, which can arise from two situations: the rivalry is absolute when resource quantities are effectively limited. However, the scarcity can be considered as relative when resources are sufficient and available but when sharing arrangements deprive some users (for example when important surfaces of land are granted to one specific actor and exclude *de facto* other types users). A rivalry does not become necessarily a use conflict. It tends to remain non-confrontational as long as a regulatory framework regulates distribution of uses in coherent and balanced manner.

Moreover, a rivalry can be mitigated (or even disappear) if the resource capacities are considerably increased through natural or technical solutions or if one rival use disappears. Therefore, passing from rivalry to use conflict will depend on the capacity of the institutional arrangement (to be understood as private arrangement such as contracts or as regulations depending on specific public policies) to frame, to distribute and redistribute use rights in an equitable and coherent way between the different users/sectors of activity. This distribution of use rights will depend of different institutional levels (national, regional, local³), through formal rules and/or informal agreements implement by the actors themselves.

Step 2

After identifying the main resource uses within the nexus, the methodology aims to analyse the main regulations at the sectoral and intersectoral levels. In other words, it aims to identify the regulations at two levels: focusing on the different resources uses within the nexus (water, land, energy and ecosystems), the first level concerns the legal provisions framing one resource's use in particular. After understanding the first level, the second one focuses on the interactions between the different users. This second level allows the analyst to reveal the extent to which the sharing of resources is regulated and which potential rivalries are effectively taken into account by the regulatory framework.

Step 3

The third step focuses on the configuration of the actors involved. The aim of this section is to analyse, what kind of actors are involved (private actors, public actors, national actors, international actors, users associations, NGOs, etc.) in the management of resources. It also aims to determine the nature of links between these identified actors (what kind of agreements are implemented? Are they private law agreements or public law agreements? Which institutional level is framing agreements? What is the position of public actors within this

³ Or even transboundary if existing institutional framework

configuration?). This third step allows the creation of a map to illustrate the configuration of actors and the nature of their interactions.

Step 4

Finally, the methodology helps to identify specific *hot spots* (to be understood as the main rivalries identified in step 2) at different institutional levels (local, regional, national, transboundary). This fourth step goes into depth and analyses the governance structure through selected case studies. The analysis focuses on the main use rivalries between actors and tries to understand how these tensions are regulated. Through this specific analysis, the analyst identifies the salient characteristics of the institutional framework by calling upon four analytical variables: extent, coherence, robustness and flexibility (see Box 3). This analysis allows the analyst to grasp the functioning of the system as a whole and to identify its regulation and adaptive capacities.

BOX 3. DEFINITION OF ANALYTICAL VARIABLES:

These different variables result from a review of several publications on environmental policies and on the study of Institutional Regime for Natural and Infrastructural Resources. For more information, please check the following publications: Knoepfel et al. 2007 / Gerber et al. 2009.

Extent:

The extent of regulations allows the study of how the applied public policies regulate the different uses. The more the regulatory framework is characterised by its density (a high number of public policies or property rights that shows the capacity of the state to regulate the different uses), the more we can consider the extent as important. Here, the analyst will have to look at the different sectors of activity and on how these different uses are effectively regulated. The analyst will have to evaluate if there is a need for specific regulations (for example the case where a use is unregulated or suffers from poor regulation with the resulting uncontrolled intakes) or if the rules are able to effectively frame the different uses.

For example, the analyst will check if uses of the different sectors within the nexus are regulated to the same extent: is there always withdrawal authorisation process? Is there always an attribution of land use or construction permits? Is there always a public inquiry before permission is granted? Is there any procedure or legal norms used in order to allow the granting of permission? From what administrative levels are permits issued?

→ For indicators regarding extent assessment, please refer to appendix: check-list A

Coherence:

This second analytical variable helps the analyst to understand if there is any coherence between the different objectives intended by public policies and to evaluate the degree of coordination involved. Two public policies targeting opposing objectives will show problems of coherence regarding the action of a state. This would be the case of a public policy aimed at protect high quality aquatic ecosystems as opposed to a public policy protecting residential areas from flooding. The more legal dispositions are complementary, well articulated and not counter-productive, the more the legal framework can be considered as coherent.

→ For indicators regarding extent assessment, please refer to appendix: check-list B

Robustness:

The robustness should be understood as the capacity of the regulatory framework to effectively control the different uses. The degree of robustness results from the combination of the Extent and Coherence analysis. The analyst will assess the degrees of extent and coherence. The robustness will depend on the combination of the two variables. The more the regulatory framework is extended and coherent, the more it will be robust (or, in other words, integrated). Here the analyst has to evaluate the relationship between the two first variables.

Flexibility:

Flexibility represents the room for manoeuvre, which actors have in order to self-organise. This variable depends on the gaps found in the regulatory frameworks - gaps generally used by actors to produce institutional arrangements in their favour. Such arrangement can be translated by private law agreements or informal arrangements between different users/sectors of activity. For example, in the case of the Rhone River, the transfer of water regarding the cooling of nuclear plants results mainly from water exchanges between private actors. Here the exchanges depend on private law agreements (contracts) that have been decided and implemented by energy producers directly. The state is not directly involved and does not hold an important steering role in the process.

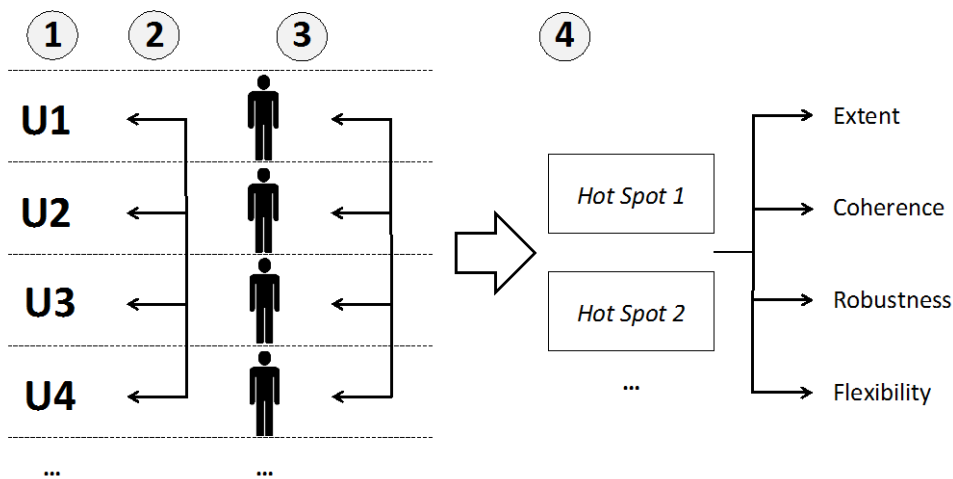


Figure 2. Scheme of institutions analysis⁴

4. Let's apply the methodology

⁴ The figure 2 illustrates the whole methodology. In summary, the first step concerns the identification of resource uses (sectors of activity, e.g. drinking water, irrigation, hydropower, cooling of nuclear plants, industry, etc.). The second step concerns the regulations of water uses by analysing the regulations of one sector in particular and the interactions between the different sectors. The third step reflects on the configuration of actors and on the legal nature of the links between the actors. The fourth step leads to an in depth analysis of hot spots identified as the most iconic rivalries by the analyst. This analysis is done through the mobilisation of four analytical variables: Extent, Coherence, Robustness and Flexibility.

The structure of the methodology has now been outlined and so it becomes time to apply the various steps and move to the implementation phase. This is executed through a series of questions. Answering these questions allows the analyst to build an understanding of the nature of the nexus at the national and transboundary level. Every step contains specific questions to be answered. The analyst will have to draw upon different kind of sources to locate and identify specific information.

Step 1. Identification of the main resource uses within the nexus

Questions	Check
1. What are the main sectors of activity consuming resources within the nexus?	
2. What are the main economic activities in the basin?	
3. Are these activities going to change in the future (for example, food production is expected to become less important, or a specific industrial branch is expected to develop at an accelerated rate, etc.)?	
Water	
4. Please list the main sectors and activities (in order of importance) requiring water withdrawals in the basin. What is the annual water use for each of them?	
5. Related to the total amount of available water, what is the volume (in percentage) of water consumption per user?	
6. Is there an evolution in the use of water?	
7. Have historical water levels in the basin's water bodies changed noticeably in recent times (last couple of decades)?	
8. Has the basin experienced any shortages in water supply in the past two decades? If yes, why did it happen, when, and which sectors were affected?	
Land	
9. What are the main activities using land?	
10. What surface of land is dedicated to specific uses (agriculture, industry, housing, etc.)?	
11. How land use does evolve? Identify global trends? (for example a decrease of land surfaces dedicated to agriculture)	
12. Is this trend homogeneous at the transboundary scale?	
Energy	
13. What are the main sectors regarding energy production?	
14. Is this distribution between different energy sectors stable or evolving?	
15. Is there any water rights dedicated to the production of electricity?	
16. Is the country self-sufficient regarding energy consumption? Is the country importing or exporting energy? What kind of energy?	
17. What kind of operator (private, public, semi-public) is involved in the production of energy?	
18. From what kind of energy sources comes the national energy consumption?	
19. Which ministers are in charge regarding national energy policy? Regarding production and pricing of energy?	
20. Are power failures considered as frequent events?	

Step 2. Identification of main regulations at the sectoral and intersectoral level

Questions	Check
21. What are the main legislations regarding the different uses within the nexus? <ul style="list-style-type: none"> • Legislations regarding water management and protection • Legislations regarding land management and protection • Legislation regarding energy • Legislation regarding protection of ecosystems 	
22. Can any potential conflicts with objectives from different sectors be identified?	
23. Is there any Basin Organization?	
24. Are there any development plans focusing uses within the nexus (plans on water, energy, land, ecosystems management)? If yes, please list these.	
25. Is there any law/convention/arrangement regarding transboundary water management?	
26. Is there any sectorial agreement at the transboundary level? (agreements regarding energy production and distribution for example)	

Step 3. Description of the configuration of actors

Questions	Check
27. What is the structure of the institutional framework? What are the institutional levels regulating uses? What kind of authority (national, regional, local) is responsible for implementing the legislation? <i>Examples of public actors: ministries/environmental or water agency/regions authorities/local authorities/etc.</i> <i>Examples of private actors: energy producers (hydropower, nuclear energy)/fishing companies/navigation companies/tourism professionals/farmers/etc.</i> <i>Other type of actors: Basin Organisation (at the national or transboundary level)/Water users association/Non Governmental Organisations/etc.</i>	
28. Who are the main actors involved within this configuration?	
29. What is the nature of the links between the main actors (see BOX 1) (private law: contracts, arrangements etc./public law agreement: concessions, etc./informal agreements)?	
30. Is there any tension between the different water uses within the nexus? <i>A tension can be identified through latent conflicts between resource users. Press articles regarding such tension or specific arbitration by the state between different sectors are a good means to identify such tension.</i>	

Mapping of the configuration and of the nature of links between actors

- What are the objectives of such map?

Mapping the configuration of actors allows the analyst to identify, at a glance, the relationship and the nature of links between different parties. The cartography helps to answer a number of key questions such as:

Questions	Check
1. What is the degree of centralisation?	
2. What is the role of public actors?	
3. To what extent do uses of resources result from self-organisation between private actors? What kind of agreement has been implemented?	
4. How robust is such an agreement?	

- How to proceed?

The mapping is constructed by two main components. The first component captures all the users operating within the actors' configuration. The second component graphically represents the links between actors by using specific arrows. The arrows show the direction of interactions and the nature of the links. Two main characteristics are clearly represented: public law agreements (the nature of links shows the level of agreements implementation) or private law agreements.

Figure 3 shows an example of such cartography in the case of the Rhone River (Bréthaut & Pflieger 2013). The map is drawn for a specific geographical perimeter (from Lake Geneva to the city of Lyon) and focuses on the transboundary scale. The actors are represented within the different circles. The red arrows represent agreements issued from public law whilst the blue arrows represent agreements issued from private law. The black arrows represent the institutional links between Governments and administrations.

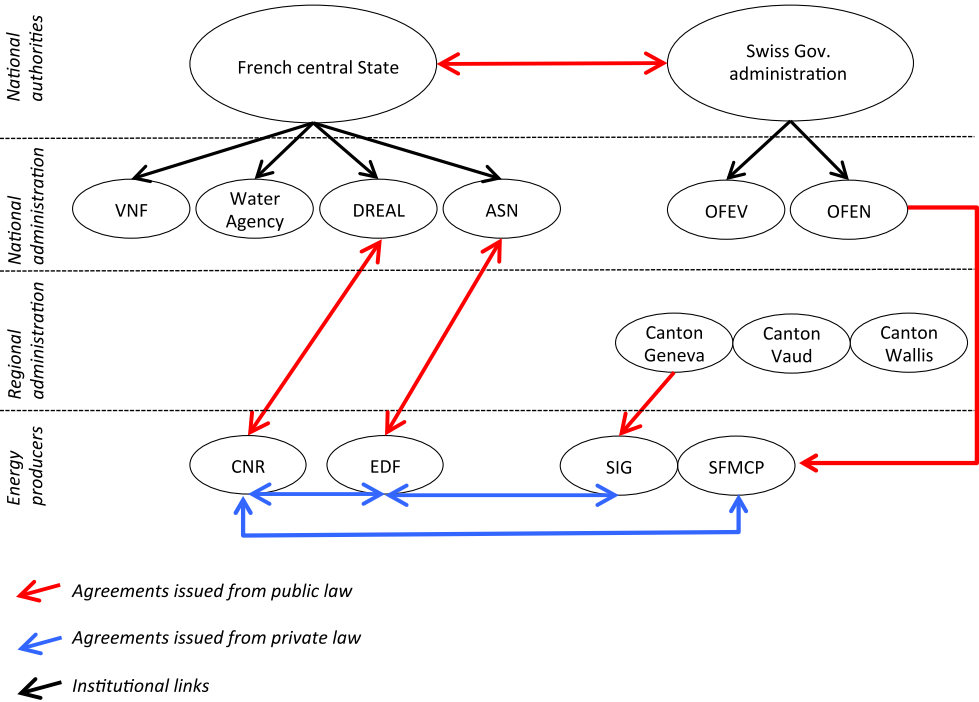


Figure 3. Cartography of the configuration of actors in the case of the Rhone River

The drawing of the map has to be adapted to each case. There may be multiple institutional layers, or multiple government representatives that may imply different kinds of ministries. Private actors are not necessarily always present and other types of institutions might be involved i.e. basin organisation.

Step 4. Identification of main use rivalries within the nexus

This fourth step furthers the analysis of intersectorial issues within the nexus. Here the analyst focuses on one specific and detailed case study. The idea is to concentrate on major uses rivalries / tensions / use conflicts occurring within the river basin. As a direct result of the analysis of water uses, the configuration of actors and of the main regulations, an image of the main rivalries should emerge (for examples of use rivalries, see table 1). This is called a *hot spot*.

The definition of a hot spot is a certain specified tension that can be used in order to analyse the regulatory and institutional framework in action. This *hot spot* will help to identify the strengths and weaknesses of the institutional framework. More specifically the analysis of a specific case will enable the application of the analytical variables of Extent, Coherence, Robustness and Flexibility (*refer to appendix → check-list C for indicators regarding the choice of hot spots*).

Table 1. Examples or rivalries occurring between different sectors within the nexus

Sector x	Sector y	Types of rivalry
Nuclear energy	Hydropower	Upstream retention of water for hydropower production purposes versus downstream need for water for cooling of nuclear plants
Hydropower	Ecosystems	Upstream retention of water for hydropower production purposes versus downstream minimal flows for aquatic ecosystem
Drinking water	Agriculture	Intakes of water to produce drinking water versus diffuse pollution depending on agricultural fertilizers
Industry	Agriculture	Intakes of groundwater to support industrial processes versus intakes of groundwater to supply irrigation
Nuclear energy	Ecosystems	Water uses to cool down nuclear plants versus effects of temperature increase due to water rejection after cooling on surrounding ecosystems
Water sanitation	Ecosystems	Polluted water discharges without treatment versus pollution of environment

The fourth step is applied through three different procedures:

1. Definition of main rivalries between sectors of activity (users of resources) and identification of *hot spots* to be analysed

Firstly, the analyst returns to the selected data and identifies the main rivalries within the nexus i.e. the rivalries occurring in the studied river basin. Within these different cases, the analyst will choose major rivalries that will be used as *hot spots*. Ideally, these cases will reflect the implementation of regulation mechanisms. This will facilitate the analysis of the steering capacity of the institutional framework. However, if this is not possible, it is

important to note that the lack of such mechanisms can potentially be interesting too in order to reveal any deficiencies in regulation.

2. Describing the *hot spot*

Once the *hot spots* have been identified, the analyst presents the main issues of the selected situation and in turn, the process that led to this rivalry. This description aims to identify the needs of each sector of activity, the reasons for the rivalry and the action taken (by the government, by the actors themselves, etc.) in order to regulate such tension. Through the analysis of a specific situation, the analyst will be able to identify the strengths and weaknesses of the associated institutional framework. When applied within the context of the nexus, this narrative aims to present how specific rivalries emerged. The aim of such process is to go step further than the simple explanation of the situation as the analyst tries to identify the causes of such evolution and the evolution of actors' interactions. Here the narrative process invites the analyst to tell the story of specific *hot spots* and to go further by already identifying the links between causes and effects.

3. Analysis of the regulation mechanisms through variables of Extent, Coherence, Robustness and Flexibility

Finally, the *hot spots* are analysed through the analytical variables of Extent, Coherence, Robustness and Flexibility (see BOX 3 for definitions). Each variable is subject to a question and to a final rating (based on a combination of the previous information collected and the different questions answered)⁵. The latter is divided between three dimensions assessed by the analyst: low (0) / average (+1) / strong (+2). The aggregation of the various evaluations is translated through a radar graph composed by four axes representing the different variables (see figure 4). This evaluation results from collected information during the four different steps of the methodology. It represents a subjective assessment of the analyst in charge of the methodology.

a. Extent _ Question 1

Within the analysed *hot spot*, to what extent is the regulatory framework (public policies identified as regulating the water use of involved sectors of activity) able to regulate the rivalry of use? Are the public policies sufficient in order to distribute use rights between the involved actors? Are uses of the different sectors within the nexus regulated to the same extent: is there always a withdrawal authorisation process? Is there always a public inquiry before licensure? Is there any procedure or legal norms used in order to allow the licensure?

→ Refer to appendix check-list A for indicators regarding extent evaluation

b. Coherence _ Question 2

Within the analysed *hot spot*, do you consider that the public policies are coherently applied? Are they implemented following a similar objective? Do the different institutional levels intervene in a coherent way?

→ refer to appendix check-list B for indicators regarding coherence evaluation

⁵ Quantification of analytical variables results from a subjective perception of the analyst. This perception is based on the information and legal dispositions collected and analysed while answering the different questions of the methodology.

c. Robustness _ Question 3

Taking into account the assessment of the degree of Extent and Coherence, how do you evaluate the robustness of the regulatory framework? (Consider here that the more the regulations lean towards extent and coherence, the more robust the regulatory framework will be.)

d. Flexibility _ Question 4

Within the analysed *hot spot*, do you consider that actors manage to maintain room for manoeuvre for self-organisation? Do you identify any lack of Extent or Coherence that is sought out by actors through agreements / informal arrangements / etc.?

e. Radar graph illustrating the degrees of Extent, Coherence, Robustness and Flexibility

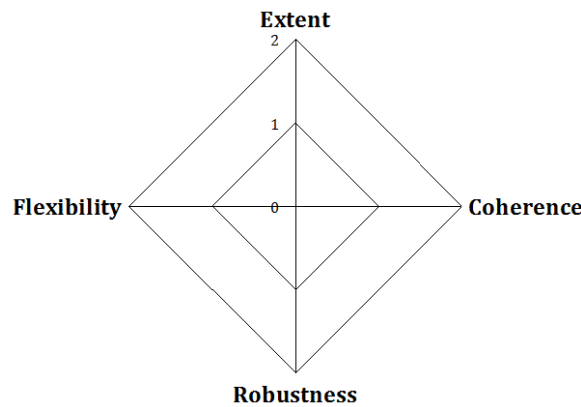


Figure 4. Radar graph of the analytical variables: Extent / Coherence / Robustness / Flexibility rated between 0 (low) / +1 (average) / +2 (strong)

1. Appendix: Check lists

- **Check-list A** regarding the different variables to evaluate extent

Extent of the regulatory framework	Low	Average	Strong
Water			
Definition of water protection maps			
Definition of flood management plans			
Submission for approval for all water withdrawals in river, lake or groundwater			
Definition of minimal flows for any river intakes			
Legal obligation of used water treatment before reintroduction in hydrological cycle			
Definition of instruments regarding rain water treatment/evacuation plans			
Legal obligation of connecting buildings to urban water networks			
Prohibition of discharge without treatment for any substances which are potentially polluters for water resources			
Establishment of a management scheme at the river basin scale (at			

the national or hydrological level)			
Legal disposition regarding the consideration of all water resources users within the nexus			
Existence of transboundary agreements (and observance mechanisms on implementation) regarding water management			
<i>Land</i>			
Existence of a land register			
Definition of land use planning instruments			
Requirement of construction permits			
Definition of duties regarding the implementation of land use planning instruments			
<i>Energy</i>			
Definition of minimal environmental flows			
Legal provisions regarding energy production and its impacts on ecosystems (definition of water flows, regulation of water temperature, etc.)			
Legal provisions framing concession contracts regarding the operation of electricity production infrastructures (definition of rights and duties for involved parties)			
Implementation of environmental compensation mechanisms (construction of fish ladder for example)			
Transboundary agreement on energy (or issues related to energy production such as transfer of sediments for example)			
<i>Ecosystems protection / General principles</i>			
Implementation of the polluter pays principle			
Definition of emission limit value/immission limit value			
Mandatory Environmental Impact Assessment			
Legal obligation for public inquiry regarding any project (public or private) potentially affecting the environment			
Provisions regarding natural habitats, wild life and flora's protection			

- **Check-list B** regarding the different variables to evaluate coherence

Coherence of the regulatory framework	Low	Average	Strong
Coordinated implementation of legal dispositions throughout the different institutional levels			
Coordination of objectives targeted by the different public policies			
Action undertaken in a coordinated manner by the different state services			
Consistency in the definition of target audiences regarding the objectives of public policies			
Coordination between actions implemented within the river basin			

- **Check list C** regarding the choice of analysed hot spots

Criteria for the selection of potential hot spots
Intersectorial rivalries observed in the nexus
Latent tensions between different sectors: <ul style="list-style-type: none"> - Press articles - Legal complaints - Concerns within administration, etc.
Proven tensions between various sectors (signs of open conflicts): <ul style="list-style-type: none"> - Press articles - Judgments - Arbitration, etc.
Tensions/difficulties within the configuration of actors
Difficulties regarding the functioning of one sector because of the actions undertaken by other sectors
Increase of intersectorial tensions in times of extreme events (flooding or droughts)
Consultation mechanism regarding coordination between the different sectors within the Nexus

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